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Application/Control Number 10/789,146
Art Unit 2877
Response dated August 29, 2006
Reply to Office Action dated June 1, 2006

Examiner: Claims 1 and 5-6 stand rejected under 35 U.S.C. 102(b) as being anticipated by *Bednarz et al.*

Response: Claim 1 is patentably distinguishable from *Bednarz* since *Bednarz* does not disclose the displaying of the position of a foot during a jump takeoff as claimed in claim 1. Rather, *Bednarz* discloses an indication when the athlete's jumping foot has approached within a predetermined distance of the scratch or foul line (col.10 lines 44-53). Claim 1 claims the displaying of the position of the foot during a jump takeoff whereas *Bednarz* only discloses an indication of when a line threshold has been passed by the jumping foot ("... system for detecting ... when a portion of an athlete's shoe crosses over a long or triple jump foul line when beginning the jump ...") but gives no further indication as to the position of the jump foot. In other words, Bednarz claims and describes a detection system utilizing a single light beam.

The method for detecting the position of a foot during a jump takeoff found in claim 1 of the current application is an improvement from what is disclosed in *Bednarz* in that it allows the athlete to identify where his/her foot landed in relation to a particular light beam enabling the athlete to more easily make adjustments to his/her approach stride while what is disclosed in *Bednarz* only alerts the athlete that his/her foot has crossed the light beam threshold but gives no indication as to how much of the athlete's foot crossed the threshold. More specifically, claim 1 calls for providing a plurality of light beams, and thus is not anticipated by Bednarz.

Claims 5 and 6 are patentably distinguishable from *Bednarz* since, for the reasons stated above, they are dependent on claim 1. For the reasons discussed above, *Bednarz* does not describe and

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does not anticipate applicant's application. Withdrawal of this rejection is respectfully requested.

Examiner: Claims 2-4 and 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Bednarz et al* in view of *Stroman et al.*

Response: Regarding claim 2-4 and 18, the Examiner states that *Bednarz* discloses all of the features of the claimed invention except for collimating each one of said plurality of light beams, and collimating each one of said plurality of light detectors. For the reasons discussed above pertaining to claim 1, Applicant respectively submits that *Bednarz* does not disclose all of the features of the claimed invention, specifically the displaying of the position of a foot during a jump takeoff. Additionally, MPEP 2143.03 states that "[i]f an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." *In re Fine*, 837 F.2d 1071, 5USPQ2d 1596 (Fed. Cir. 1988). Therefore, since claim 2 is dependent on claim 1 and claim 1 does not stand rejected under 35 U.S.C. 103 for being obvious, claim 2 is also non-obvious.

Additionally regarding the rejections of claims 2, 3 and 18 examiner correctly notes that Stroman teaches collimating light beams. The light sources in the preferred embodiment of Stroman "comprise high output infrared emitters." Stroman continues "[o]ther wavelengths, such as those of visible light, could be used ..." Nowhere does Stroman suggest the use of a laser beam as a light source. Laser beams generally NOT require a collimating system, since the laser light tends to be inherently collimated.

In contrast to Stroman, Bednarz's invention uses a laser beam as the light source. There is no motivation to combine the collimating devices of Stroman with the invention of Bednarz. Lacking motivation for combining the references, a *prima facie* case of obviousness has not been established.

> Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. - MPEP 2143.01

Regarding claim 3, the Examiner states that *Bednarz* discloses all of the features of the claimed invention except for placing an aperture in front of each one of said plurality of light beams and light detectors. For the reasons discussed above pertaining to claim 1, Applicant respectively submits that *Bednarz* does not disclose all of the features of the claimed invention, specifically the displaying of the position of a foot during a jump takeoff.

Regarding claim 4, the Examiner states that *Bednarz* discloses all of the features of the claimed invention except for enabling said plurality of light beams and said plurality of light detectors sequentially. For the reasons discussed above pertaining to claim 1, Applicant respectively submits that *Bednarz* does not disclose all of the features of the claimed invention, specifically the displaying of the position of a foot during a jump takeoff. Additionally, MPEP 2143.03 states that "[i]f an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." *In re Fine*, 837 F.2d 1071, 5USPQ2d 1596 (Fed. Cir. 1988). Therefore, since claim 4 is dependent on claim 1 and claim 1 does not stand rejected under 35 U.S.C. 103 for being obvious, claim 4 is also nonobvious.

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Further regarding claim 18, the Examiner stated that *Bednarz* disclosed the position of a foot during jump takeoff. However, claim 18 is patentably distinguishable from *Bednarz* since *Bednarz* only discloses an indication of when a line threshold has been passed by the jumping foot but gives no further indication as to the position of the jump foot (col.10 lines 44-53), whereas Applicant stores the foot position at jump takeoff instead of merely storing an indication that the athlete's foot has crossed a particular threshold (697 of figure 16).

For the reasons stated above, Applicant respectfully submits that claims 2-4 and 18 are not obvious in view of *Bednarz and Stroman.* Withdrawal of this rejection is respectfully requested.

The references made record and not relied upon have been reviewed. Eriksson (US 4,089,057) employs a radio signal for certain measurements related to ski jumping. Gordon (US 4,168,061) uses a chalk mark to measure distance jumped. Carlin (US 4,774,679) and Tipton, et al. (US 6,181,647) employ mechanical detectors to measure forces involved with a jump. Nakamura, et al. (US 5,625,191); Borchers , et al. (US 5,753,931); and Verga (US 6,782,118) all relate to photographic methods of measuring. And Holand, et al. (US 6,135,921) does not appear to use any measurement technique in the disclosed Long Jump Training Apparatus. None references, taken alone or in combination, anticipate or render the claims of the current application obvious

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Conclusion

It is submitted that claims 1-6 and 18 are now in condition for allowance. A Notice of Allowance is therefore respectfully requested.

Very respectfully,

Richard S Missimer
Patent Agent for Applicant
USPTO Reg # 45,537

Certification of Facsimile Transmission: I certify that on the date below I faxed this paper to GAU 2877 of the US Patent and Trademark Office at (571) 273-8300.

2006 August 29

Richard S Missimer (USPTO Reg # 45,537)